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IN REPLY PLEASE
REFER TO FILE: WM-7

June 25, 2003

TO: Each Supervisor

FROM: James A. Noyes
Director of Public Works

SURVEY OF PUBLIC ATTITUDES TOWARDS WATER QUALITY AND FUNDING OPTIONS

On May 14, 2002, the Board authorized a $50,000 expenditure to the Coalition for Environmental Protection Restoration Development (CEPRD) for developing and conducting a survey related to the National Pollutant Discharge Elimination System Program and Total Maximum Daily Load (TMDL) mandates. CEPRD assembled a comprehensive questionnaire and telephone interviewed 600 likely voters over the period of October 23-26, 2002. Those surveyed were from both coastal and inland communities. The results were tabulated. CEPRD included a summary of existing and potential new funding options to comply with the mandates. The County Sanitation Districts of Los Angeles County also contributed $50,000 to this effort.

CEPRD has finished the survey required by the contract. Attached for your review is a copy of the final report on the survey. Some of the highlights include that most voters perceive urban runoff to be a serious problem. We are encouraged that this level of awareness exists. This is probably due in part to our efforts of the last 10 years working with our Cities, Heal the Bay, and the Santa Monica Restoration Commission to educate the public. However, substantial majorities of the respondents believe that public attention should first be directed to other social and economic priorities. They oppose diverting funds from existing programs or creating a new tax to address urban runoff and other TMDL program objectives. However, most are willing to impose a waste generation fee on cigarettes, food and drink containers, and similar products that may contribute to regional water quality problems. The public will support water quality programs that are properly identified and justified.

This survey, along with other surveys, will assist us in formulating strategies and implementation plans to ensure public support of future funding measures. We are considering the merits of Joint Powers Authorities, increased partnering with stakeholders, and using other Public Works funds in addition to the Flood Control Fund. We will be exploring the steps to establish user/generation fees while continuing to refine TMDL implementation costs.

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Attach.

cc: Chief Administrative Office
Executive Office

Funding Total Maximum Daily Load Development and Implementation in the Los Angeles Watershed

A Survey of Public Attitudes and Potential Options

Prepared by the

Coalition for Environmental Protection, Restoration and Development

April 21, 2003

Background and Summary

This report presents the results of a survey that examines the extent to which likely voters from coastal and inland cities within Los Angeles County are willing to fund total maximum daily load (TMDL) development and implementation. It demonstrates that most voters perceive urban runoff to be a serious problem. Yet, substantial majorities of the survey respondents believe that public attention should first be directed to other, more significant social and economic priorities. Area residents strongly oppose the diversion of any existing program funds or the creation of new taxes to address urban runoff and other TMDL program objectives. Most, however, are willing to impose waste generation fees on cigarettes, coffee and similar products in the event such consumption is shown to contribute to regional water quality problems.

These results do not appreciably vary in accordance with the location of the survey respondents within the watershed. Coastal and inland voters view water quality and TMDL issues in strikingly similar ways. Consequently, the survey indicates that water quality programs in general must be carefully designed to assure that adequate funding and public support will be forthcoming. In particular, the TMDL program must:

> Assure that water quality standards and goals reflect the best possible technical information;
>
> Focus on clear and significant health and ecological issues and avoid speculative, more ambiguous objectives;
>
> Clearly identify the sources of the discharges of concern; and
>
> Link the funding of specific cleanup efforts to the identified sources of discharges by means of use fees and similar generator-related measures.

The survey results suggest that the public will support TMDLs and water quality programs that are properly identified and justified. Efforts that are not adequately supported with technical information, or which appear unreasonable, will likely conflict with other more compelling public priorities. Consequently, the most significant predicate to achieving adequate TMDL program funding is to assure that regional water quality regulations address clear and significant public concerns.

I. New Mandates, Limited Funds

Under the federal Clean Water Act, states are required to control constituent discharges into water bodies to protect the designated uses of the receiving waters. Designated uses include such activities as recreation, drinking, or agriculture. The law initially subjects point-source dischargers (i.e., wastewater treatment plants, refineries, power generation facilities, factories or stormwater sources) to regulation. If a water body's beneficial uses are still impaired after all point-source discharges have been adequately controlled, a state must adopt a total maximum daily load (TMDL) to limit all discharges, including those from non-point sources (i.e., agricultural drainage, air pollution, etc.) to the levels required to protect the affected beneficial uses.

In 1999, the U.S. Environmental Protection Agency (EPA) settled a lawsuit that sought to compel TMDL development for most of Ventura and Los Angeles counties, the area served by the Los Angeles Regional Water Quality Control Board (Regional Board).[1] The settlement included a consent decree that established a thirteen-year schedule for completing TMDLs for all of the region's impaired waters. Under the Clean Water Act, EPA must establish TMDLs in the event the state fails to adopt the TMDL. Consequently, the 1999 consent decree triggered unprecedented efforts to establish TMDLs for trash, sediment, bacteria, metals, algae, nutrients and chloride.

TMDL development is a time-consuming, costly process. A single TMDL often requires surveys, studies, public hearings, and several technical revisions before a Regional Board can finalize regulations that define the maximum constituent load a water body can absorb while protecting beneficial uses. It has been estimated that California will be required to establish approximately 800 to 1,500 TMDLs affecting 1,400 to 1,500 water bodies throughout the state.[2] A recent list of pending TMDLs for the greater Los Angeles area spanned several pages and identified multiple objectives for each of the region's nine major watersheds.[3]

The cost of developing TMDLs is significant. In the San Francisco area, development costs appear to range from $1 million to $3 million for each TMDL.[4] A 1996 EPA assessment indicated that TMDL development costs were, at that time, about

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[1] *Heal the Bay, et al. v. Browner*, Case No. 98-4825 SBA, Consent Decree filed March 22, 1999.

[2] See, Craig S. J. Johns and Scott N. Folwarkow (Partnership for Sound Science in Environmental Policy) "The Looming Crisis" in the California Manufacturers and Technology Alliance newsletter, July 2000 (http://www.cmta.net/oped/072500tmdl.php); State Water Resources Control Board, "TMDL Information Background," http://www.swrcb.ca.gov/tmdl/background.html.

See "Table 7A. Summary Schedule For TMDL Development," and "Table 7B, Detailed Schedule of TMDL Activities (started in the next five years)," Los Angeles Regional Board, February, 2002 (http://www.swrcb.ca.gov/rwqcb4/docs/table7_wmi_appdx.pdf).

[4] Johns and Folwarkow, "The Looming Crisis," California Manufacturers and Technology Alliance newsletter, July 2000 (http://www.cmta.net/oped/072500tmdl.php).

$50,000 for all TMDLs surveyed and $500,000 for more complex regulations affecting both point and non-point sources. The study showed that costs for TMDLs in larger watersheds like Los Angeles were significantly higher.[5]

Regardless of development expenses, TMDLs generate significant implementation costs as the regulations are adopted and enforced. The Los Angeles Regional Board has estimated that it will cost approximately $1.7 billion to achieve the zero discharge numeric target set by the the trash TMDL it has adopted for the Los Angeles River watershed.[6] The trash TMDL is the first to be implemented under the terms of the 1999 EPA consent decree and the first of its kind in the nation. Program costs will likely rise many times above that level as additional TMDLs are implemented. Should advanced treatment of Los Angeles basin stormwater be required to meet other TMDLs, the construction and operational expense of new collection and treatment facilities has been estimated by several studies to range from tens to hundreds of billions of dollars.[7]

Despite the significant public investment requirements associated with TMDL efforts, the program presently has limited funding options. Most of the major potential funding sources are overcommitted and would, in any event, defray only a small portion of the anticipated costs. These include the following:

1. *National Clean Water State Revolving Fund.*

   This program utilizes a revolving fund of approximately $34 billion (in 2001) for water-related planning, design, and construction of municipal wastewater treatment systems, repair and replacement of septic systems, agricultural best management practices, animal waste control systems, erosion and sediment control systems, waterways sediment removal, landfill closures and leachate management, land acquisition to protect water resources and remediation of leaking underground storage. The fund is administered by the EPA. California's allocation from EPA Region

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USEPA, "TMDL Development Cost Estimates: Case Studies of 14 TMDLs," EPA-R-96-001, May 1996. In 2001, the EPA released an analysis of the costs of the national TMDL program in support of a proposed rule that projected an average development expense of about $50,000 per TMDL. This analysis was widely criticized and the rule was subsequently withdrawn by Congress.

Los Angeles Regional Board, "Trash Total Maximum Daily Loads for the Los Angeles River Watershed," Table 15, September 19, 2001. This assumption is based on the installation of certain street-level storm drain and gutter equipment throughout the watershed that the TMDL states it will treat as perfect compliance with the zero discharge limit.

[7] See, e.g., Gordon, et, al, "An Economic Impact Evaluation Of Proposed Storm Water Treatment For Los Angeles County" USC School of Public Policy, 2002; County Sanitation Districts of Los Angeles County "Review of the Report 'Caltrans Cost of Storm Water Treatment for the Los Angeles County NPDES Permit Area'" (2002); Brown and Caldwell, "Costs of Storm Water Treatment for Los Angeles NPDES Permit Area" Prepared for the California Department of Transportation (1998).

9 was about $96 million in 2002,[8] subject to a 20% non-federal match.[9] Although the EPA has stated that the Revolving Fund may be used for TMDL purposes,[10] the level of funding, diversity of demands in addition to TMDL activities, and the need for a state or local match will likely reduce the program's potential for defraying significant TMDL program expenses.

2. *Nonpoint Pollution Control Grants*

The EPA administers grants under Section 319 of the Clean Water Act to help control nonpoint source pollution. Nationwide program funding was about $237 million in 2001. EPA allows about 20% of the available grants to be used in the development of TMDLs. Section 319 funding is subject to a 40% state or local match. California was allocated $12.3 million in the last fiscal year, of which approximately $2.46 million was available for TMDL program use.[11] Section 319 funding is unlikely to defray significant TMDL program expenses.

3. *Water Quality Assessment and Planning Grants.*

The EPA funds state clean water planning programs under Sections 205(j) and 604(b) of the Clean Water Act. Although such funding may be used for TMDL programs, the total available resources are comparatively small, amounting to just slightly more than $600,000 for all of California (subject to a 25% state match) in the last fiscal year.[12]

4. *State Water Quality Bond Funding.*

California voters approved Propositions 12 and 13 in 2000 and Proposition 50 in 2002. Proposition 12, which approved the issuance of approximately

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[8] See USEPA, "Fiscal Year 2002 State Allotments," (http://www.epa.gov/owm/cwfinance/cwsrf/cwsrfallots.pdf)

[9] See. EPA Region 9 Clean Water State Revolving Fund program summary, http://yosemite.epa.gov/r9/fsfc.nsf/58cc78776e5e186b8825641b006a9bd8/3cb9674eafe64ffc882564210016a027?OpenDocument.

[10] USEPA, "Total Maximum Daily Load (TMDL) Based Water Quality Standards and the Clean Water State Revolving Fund," EPA 832-F-01-001, March 2001 (http://www.epa.gov/owm/cwfinance/cwsrf/fundclss.pdf).

[11] See EPA Region 9 Nonpoint Pollution Control Grant program summary, http://yosemite.epa.gov/r9/fsfc.nsf/58cc78776e5e186b8825641b006a9bd8/9d3ddc5e8b686a8a882564290069d86f?OpenDocument.

[12] See EPA Region 9 Water Quality Assessment and Planning Grant program summary, http://yosemite.epa.gov/r9/fsfc.nsf/58cc78776e5e186b8825641b006a9bd8/d52443c83328333688256429 00696104?OpenDocument.

$2 billion under the auspices of the Safe Neighborhood Parks, Clean Water, Clean Air, and Coastal Protection Bond Act of 2000, is primarily designed to acquire and manage parklands by means of local assistance grants administered by the California Department of Parks and Recreation. Approximately 80% of the total bond revenues have been or will be allocated to state, local and special park acquisitions consistent with this mandate.[13] Proposition 13 authorizes California to sell $1.97 billion in general obligation bonds to support safe drinking, water quality, flood protection and water reliability projects throughout the state. The State Water Resources Control Board (SWRCB) has set up several programs to administer a portion of these revenues as they become available, including the Watershed Protection Program, Nonpoint Source Pollution Control Program, and Coastal Nonpoint Source Control Program. Proposition 50 authorized the sale of approximately $3.4 billion to fund water quality efforts. These funds will be allocated by various state agencies through loans and grants for various projects. The State Legislative Analyst has initially estimated that the funds may be allocated to:

(a) Coastal wetland and watershed protection ($950 million);

(b) Projects helping the CalFed Bay-Delta Program ($825 million);

(c) Projects reducing water pollution, improving water treatment, and improving water quality in general ($640 million);

(d) Upgrading drinking water systems, water-quality monitoring and contaminant removal in small communities ($435 million);

(e) Pollution-prevention, water recycling and similar projects ($370 million);

(f) Desalination projects ($100 million);

(g) Colorado River management ($70 million); and

(h) Security measures ($50 million).[14]

Although Proposition 13 and 50 funds may eventually become available to defray at some of the state and local expenses associated with TMDL development, competing interests, and the need to stagger bond issuances

[13] For a summary of Proposition 12 expenditures, see the California Legislative Analysts Office, http://www.lao.ca.gov/initiatives/2000/12_03_2000.html and the Planning and Conservation League, http://www.pcl.org/bonds/12funding.html.

[14] California Legislative Analyst assessment of November 5, 2002 Ballot Proposition 50, http://voterguide.ss.ca.gov/propositions2.asp?id=221&sID=2.

to achieve the most favorable market terms, will likely reduce their overall program contribution. The cost estimated by the Los Angeles Regional Board for the Los Angeles watershed trash TMDL alone, for example, is greater than the total funds authorized under Proposition 13 and approximately 50% of the total authorized by Proposition 50. Additional TMDLs in the region and throughout the state will add to these expenses and further dilute the resources available from Proposition bond revenues. Proposition 12 funds appear to be generally earmarked for parkland purposes.

II. Potential New Funding Options

It is likely that existing funding sources will be insufficient to support Los Angeles regional TMDL development and implementation. As a result, to meet the deadlines mandated by the 1999 EPA consent decree, the regional TMDL program must consider alternative long-term revenue and funding sources, including the following:

1. New National or State Funding.

Both California and the federal government are expected to suffer from severe budget constraints for the next several years. In such an event, it is unlikely that significant additional funds at either the national or state level will be provided to defray regional TMDL costs. It is possible, but generally considered unlikely at this time, that significant, new tax revenues might be generated by a reflation of the stock market or a resurgent "bubble" economy in the manner of the late 1990s economy. However, even if such fortuitous circumstances should occur, it is not certain that the resulting tax revenues would necessarily be allocated to TMDL activities as opposed to other political priorities such as education, health, safety, and security. Consequently, the potential for significant new state or federal TMDL program support appears remote at this time.

2. New State or Local Bonds

Although localities and the state may issue bonds to raise revenues for TMDL development and implementation, recent financial circumstances are increasing the costs of such an approach. California's credit rating has been recently downgraded to one of the lowest in the nation,[15] a consequence of the state's reported $34.8 billion budget gap.[16] As a result, bond fund terms are becoming increasingly unattractive despite low interest rates and the pace and extent of public debt issuance has slowed. As of late 2002, for example, the state had not yet sold approximately 70% of the bond funding amounts authorized by Propositions 13 and 50.[17] There are several other significant public programs that would compete for any new debt issuance, including financing the state's operational budget

[15] See California State Treasurer, "History of California General Obligation Credit Rating," http://www.treasurer.ca.gov/ratings/history.htm.

[16] See, e.g., the California Department of Finance summary at http://www.dof.ca.gov/HTML/BUD_DOCS/BudgetShortfallCharts.pdf

[17] See California State Treasurer, "General Fund Supported Debt, October 1. 2002," http://www.treasurer.ca.gov/Bonds/gfdebt.pdf. The figures show that $4.8 billion of about $6.8 billion in "Water Quality Improvement & Parks" authorized bonds remains unissued.

deficit. An improving economic climate may make bond funding of TMDL programs more feasible, but at present the outlook is unpromising.

3. *New Stormwater and Non-Point Source Service/Utility Fees*

Many non-California jurisdictions have funded TMDL and related water quality programs by means of utility fees paid to water, sewer and similar service providers.[18] Unless carefully construed as fees that are unrelated to property ownership, however, Article XIIID of the California constitution may require that any such fees be subject to voter or affected landowner approvals.[19] State law expressly provides that "sewer" and "water" fees are not subject to such voter approval, but a recent state appellate court decision has held that charges for stormwater services do not fall within these exceptions.[20] Consequently, funding TMDLs by means of utility-related fees as in many other states may involve a highly uncertain, contentious referendum process in California that would likely reduce or preclude such funding.

4. *New Business Fees or Taxes.*

Funding TMDLs by means of business fees or taxes would likely lead to regional disparities. Areas subject to significant TMDL expenses (and with correspondingly higher business taxes) would be disadvantaged relative to those with smaller TMDL burdens (and thus lower business taxes). In addition, new levies would exacerbate growing perceptions of California's adverse business climate and possibly exacerbate the state's currently troubled job growth and investment outlook.[21] If such trends materialize, short term tax revenue increases may be offset by longer term declines in the regional and statewide tax base. Over time, funding for TMDL and water quality programs would be reduced.

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[18] See the University of Indiana stormwater finance case study index at http://stormwaterfinance.urbancenter.iupui.edu/.

[19] California Constitution, article XIIID, section 6(c), added by voter approval of Proposition 218 in November, 1996.

[20] *Howard Jarvis Taxpayers Association v. City of Salinas,* 98 Cal.App. 4th 1351 (2002) (reversing trial court decision that storm drainage fees were exempt from Proposition 218 and Cal. Const. Article XIIID; review denied by the California Supreme Court).

Recent national surveys suggest that California's perceived business climate has markedly deteriorated to the extent the state's relative rank has fallen from third-best in the country to last during 1999-2002. See Bradley J. Fikes, "California's Business Climate Ranked Last In Country," North County Times, September 25, 2002.

5. *Market-Based Approaches*

The EPA has announced a revised policy that allows for trading and offsets among generators in certain circumstances to maximize the efficiency of TMDL implementation.[22] To date, however, market-based water quality efforts in general, and TMDL compliance strategies in particular have been applied on only a limited basis and attempted for only a small range of constituents. None have apparently been adopted in California.[23] While market-based efforts may yet prove useful to increase the efficiency and reduce the costs of the TMDL program, given the lack of historical examples to analyze, the extent of any such benefits that may be realized in the Los Angeles area is difficult to assess.

6. *Use or Waste Generation Consumer Surcharges*

It is possible to finance certain TMDLs by means of specific use or sales taxes directly related to the generation of constituents of concern. Activities that produce adverse water quality discharges, such as coffee and fast foods (paper waste), auto products (plastics and petroleum-related waste), pesticides, or construction equipment (sediment) could be subject to a surcharge to fund appropriate TMDL compliance measures. No such taxes or surcharge appear to have yet been implemented for TMDL purposes. The closest existing analogies are levies on cigarettes or motor oil to fund health and environmental programs. Product-specific use fees may have ancillary economic consequences, but these would likely be lower than the negative impacts that would result from more general and widespread business or other taxes. Use taxes and surcharges would also likely not be subject to California's voter approval requirements pursuant to Article XIIID of the state constitution.

Virtually all potential new TMDL funding sources involve new levies on the general public. Consequently, the possibility of securing TMDL funding will be affected by the nature and degree of the public's support for TMDL programs. The following section presents the results of a regional survey designed to identify the most promising and sustainable funding options.

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[22] USEPA, "Proposed Water Quality Trading Policy," http://www.epa.gov/owow/watershed/trading/proptradepolicy.html (2002).

[23] See, e.g., USEPA, Summary of Effluent Trading Program Activity, http://www.epa.gov/owow/watershed/hotlink.htm.

III. Public Attitudes Towards TMDL Priorities and Funding

To identify public awareness of and willingness to fund Los Angeles watershed TMDL program initiatives, a comprehensive survey of 600 likely voters was conducted by the Charlton Research Group over the period October 23-26, 2002. Approximately 40% (225) of respondents were drawn from coastal communities (including Santa Monica, Rancho Palos Verdes Estates and Long Beach) and 60% (375) were drawn from inland communities (including Diamond Bar, Downey, Glendale, Glendora, and Santa Clarita). The survey was comprised of 53 questions. Each telephone interview took approximately 16 minutes to complete. A copy of the survey format and the compiled responses to each question is attached to this report. The survey's margin of error (for a sample size of 300 respondents) is +/- 4.0% at a 95% confidence level.

The survey identifies several important issues that should be considered in devising strategies to fund TMDL development and implementation:

> There is no significant difference in the responses provided by voters located in coastal and inland communities. Coastal respondents are slightly more concerned about the economy and governance (security) issues, and exhibit a slightly greater awareness of stormwater runoff and beach water quality issues. These differences, however, do not translate into significantly distinct responses regarding the relative importance of water quality programs, funding options, and other survey questions.
>
> When asked about the environment and water quality in isolation from other issues, most respondents indicate a significant level of concern. But when asked to scale their level of concern against other public priorities, they rank the environment and water quality considerably below crime, health, education, the economy, security and similar social issues.
>
> Local government is believed to be the most effective entity for achieving water qualitygoals, but most respondents do not think that municipalities should be responsible for technically unattainable standards such as zero trash discharges into regional waters.
>
> A substantial majority of respondents do not want to pay for TMDL programs by shifting funds from other social programs or by means of any new property, utility or sales taxes. Fewer respondents opposed fees on consumer products or tourism taxes. A majority would support generation-specific use fees on the consumption of goods like coffee or cigarettes.

1. Issue Priority and Level of Concern

Many surveys have documented significant public concern about regional water quality. A 2002 Gallup poll indicated that 77% of the respondents were troubled by

ocean and beach pollution.[24] A 1997 survey reported that 80% of the public believed too much waste, oil and agricultural runoff was being dumped into the ocean.[25]

When asked to rank such issues against other public concerns, however, only 5% of the total survey respondents indicated that environmental issues of any kind were a top priority. In contrast, 52% believed social issues were the most significant priority and 24% stated that economic matters were the most important concern (see Figure 1). When asked to further differentiate among several sub-issues, none of the respondents ranked water quality or trash control as a top priority compared with crime, drugs, and gangs (20%), traffic issues (11%) or education (8%). Coastal respondents rank social, economic and governance issues slightly more highly than inland respondents.

Figure 1

"Top Issue" Rank

What would you say is the single most important issue facing people in the LA area today? And what is the second most? (Q.1)

	Total		Coastal		Inland	
	First Mentions	*Total Mentions*	*First Mentions*	*Total Mentions*	*First Mentions*	*Total Mentions*
Net: Social Issues	52	90	50	93	54	90
Net: Economic Issues	24	42	23	45	22	38
Net: Governance	8	12	11	16	7	11
Net: Environment	5	15	5	14	4	14
Other	4	7	4	5	6	8
Don't know	7	7	5	5	7	7

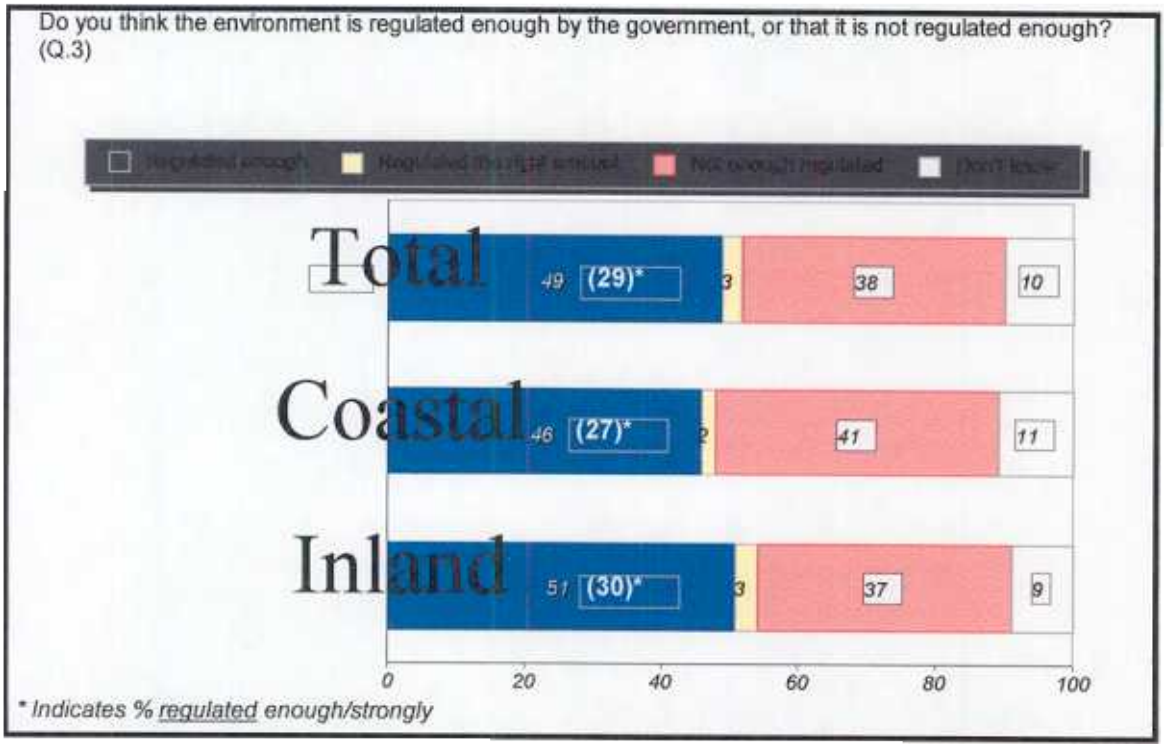
[24] Gallup poll, March 5-7, 2002, 1060 respondents.

[25] Mellman Group poll, August 21-24, 1997, 1014 respondents.

In general, 49% of the respondents (46% coastal, 51% inland) stated that the environment was being regulated "enough" by the government versus 38% (41% coastal, 37% inland) who felt that such regulation was not yet sufficient (see Figure 2).

Figure 2

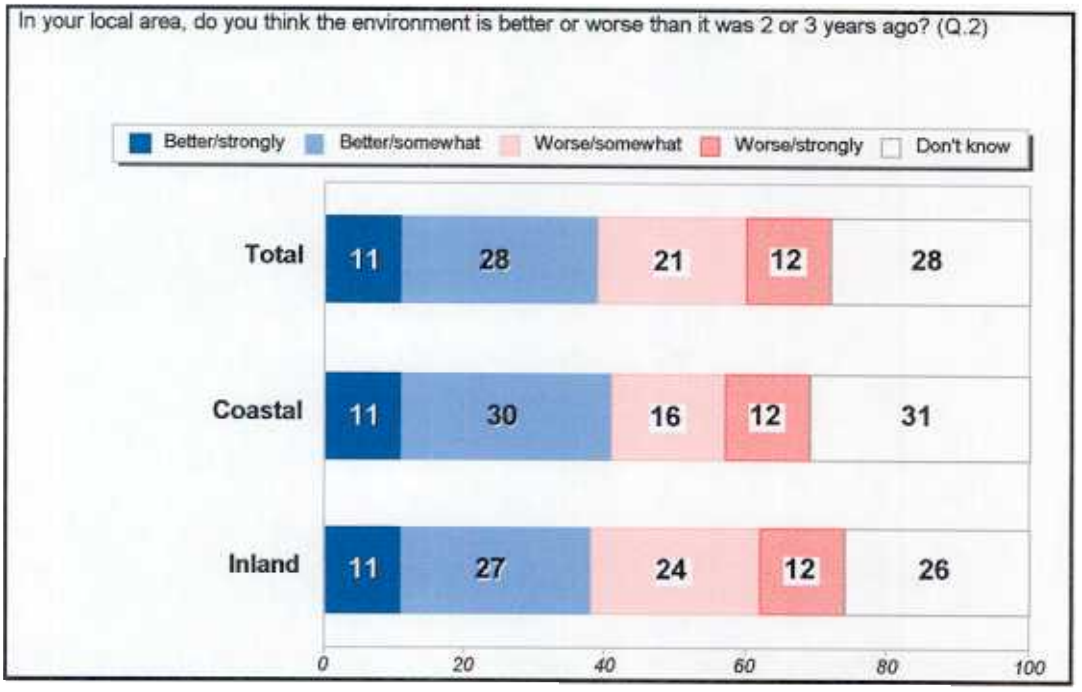
Assessment of Current Regulatory Efforts



Nevertheless, 49% of the coastal and inland respondents believed "too little" was being spent on environmental issues while 39% (coastal) and 42% (inland) stated that such spending was the "right amount" or "too much." A plurality of the survey respondents (41% coastal, 38% inland) believed that the environment had improved over the past two to three years compared with 28% coastal and 36% inland who stated conditions had become worse (see Figure 3).

Figure 3

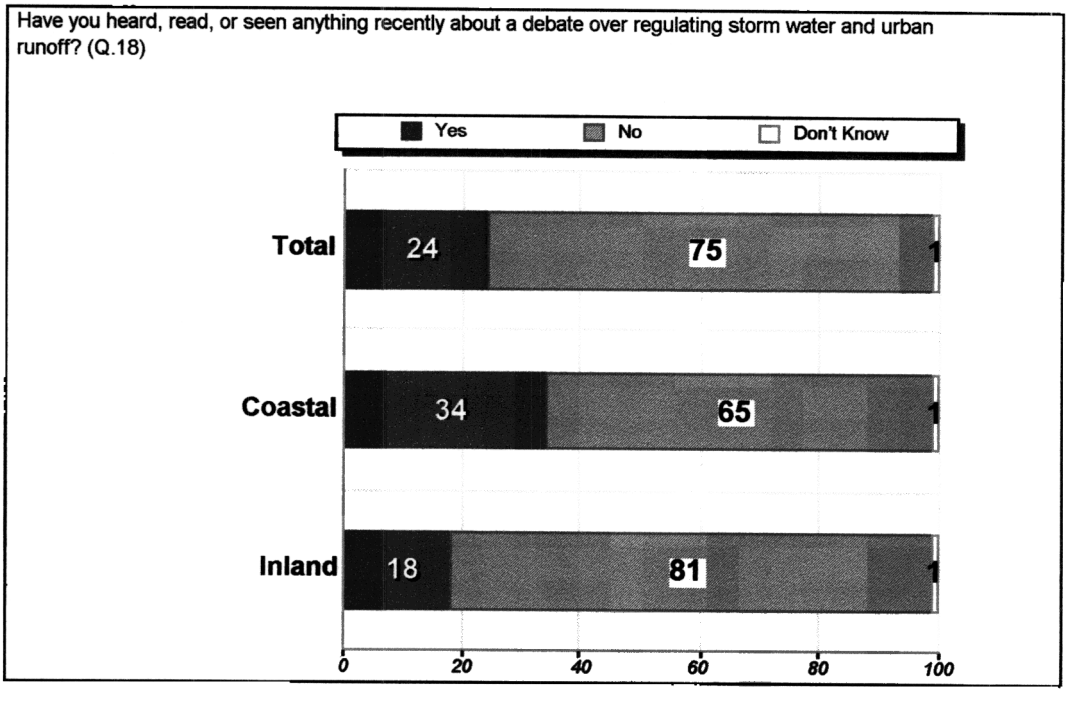
Current Environmental Conditions



About 65% of the survey respondents (54% coastal, 72% inland) reported that they or their families "not frequently" used the region's beaches. Three-quarters of the respondents (65% coastal, 81% inland) could not recall having heard, read or seen anything about stormwater and urban runoff concerns (see Figure 4).

Figure 4

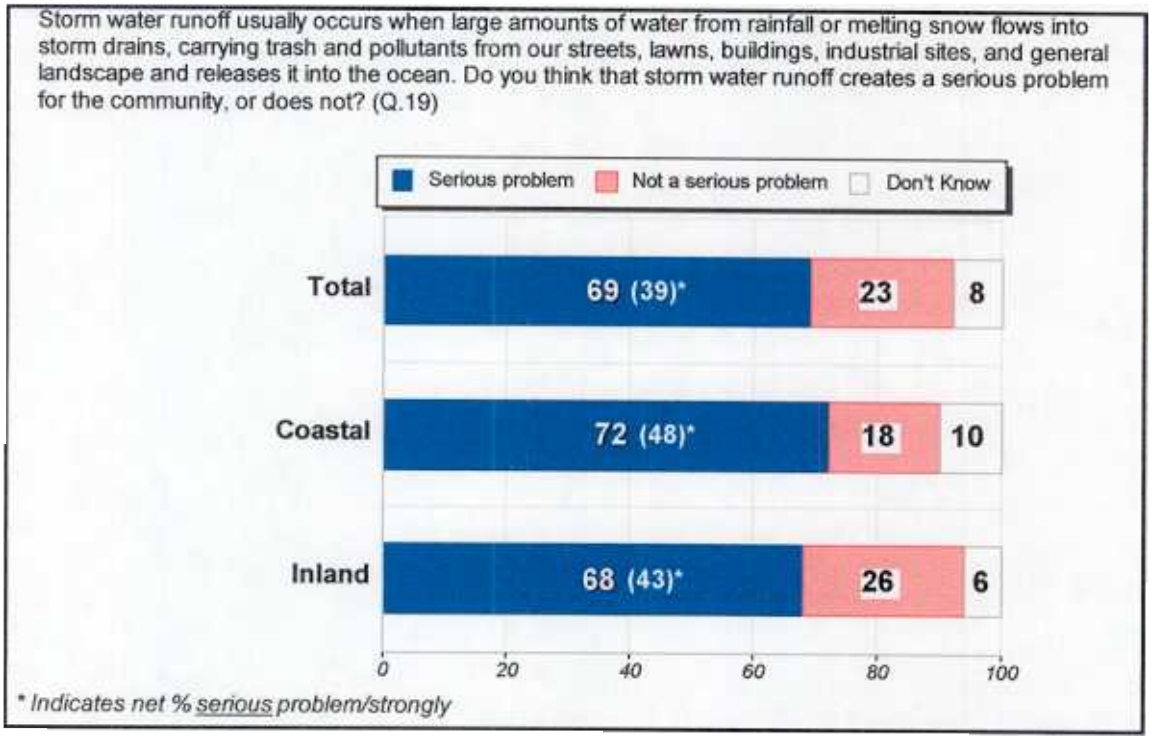
Stormwater and Run-off Issue Exposure



When survey respondents were told that surface water flows from rainfall or snow carries trash and pollutants from urban areas into the ocean, 69% (72% coastal,68% inland) stated that such circumstances were a "serious" problem (see Figure 5).

Figure 5

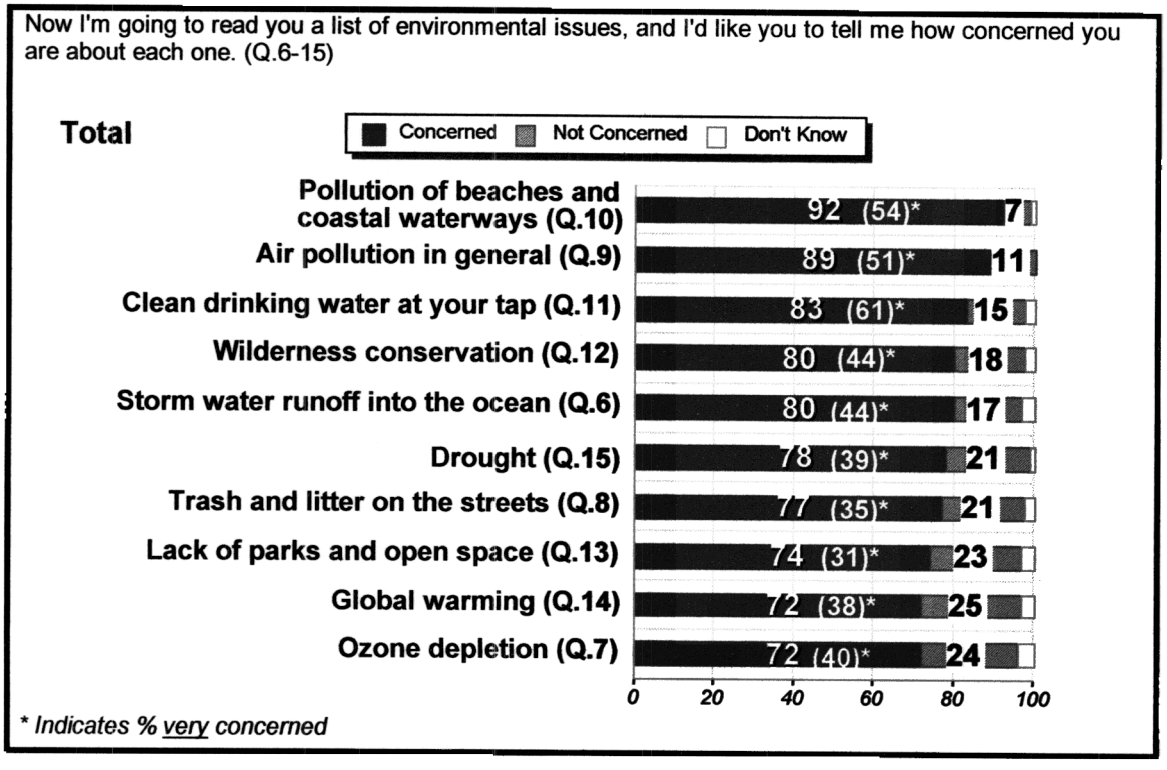
Stormwater and Run-off Issue Rank



Respondents from each area (94% coastal, 91% inland) also ranked pollution of beaches and coastal waterways as of greatest concern among all environmental issues (see Figure 6).

Figure 6

Environmental Issue Rank



The survey demonstrates that water quality concerns are viewed as important by most Los Angeles area voters irrespective of watershed location, but not as significant a priority as other social and economic problems. Among all environmental matters, runoff related concerns are ranked most highly by the survey respondents.

2. *Response Options and Responsibility*

Survey respondents identified a range of sources that they believe contribute to urban runoff. These include litter, factories, home pesticide use, shopping centers, and fast food outlets (see Figure 7).

Figure 7

Sources of Stormwater Pollution

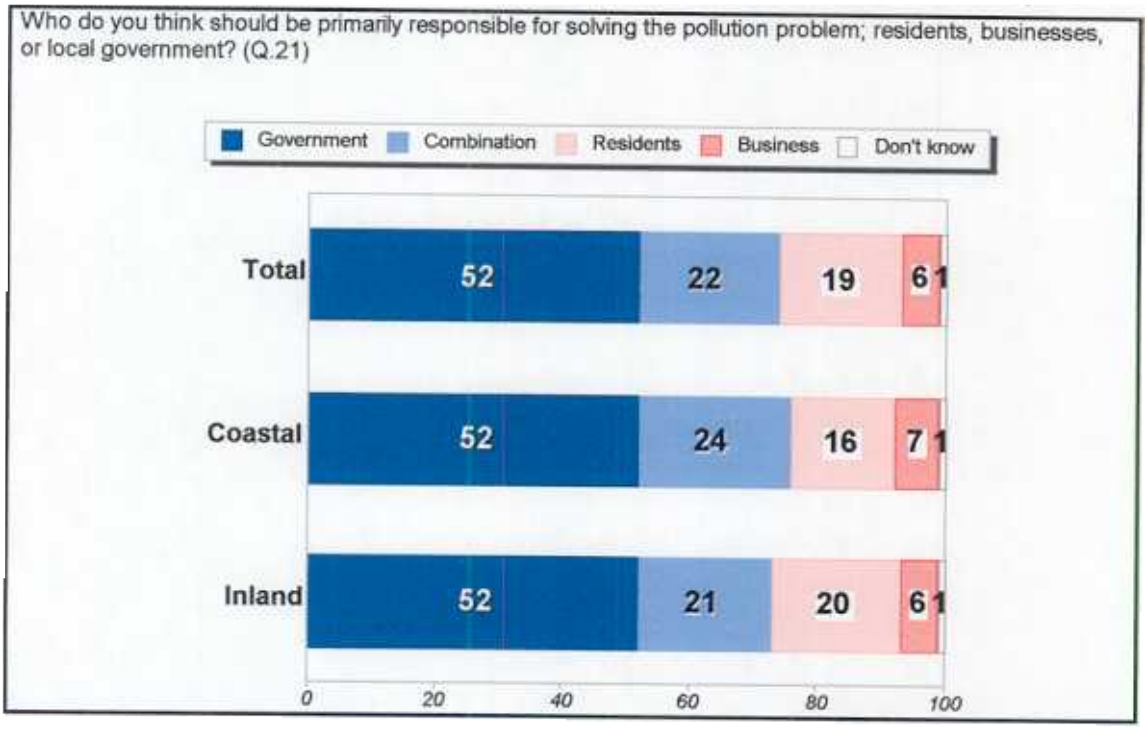
Which of the following do you think is the biggest contributor to storm water runoff pollution? Which do you think is the second biggest contributor? (Q.20)

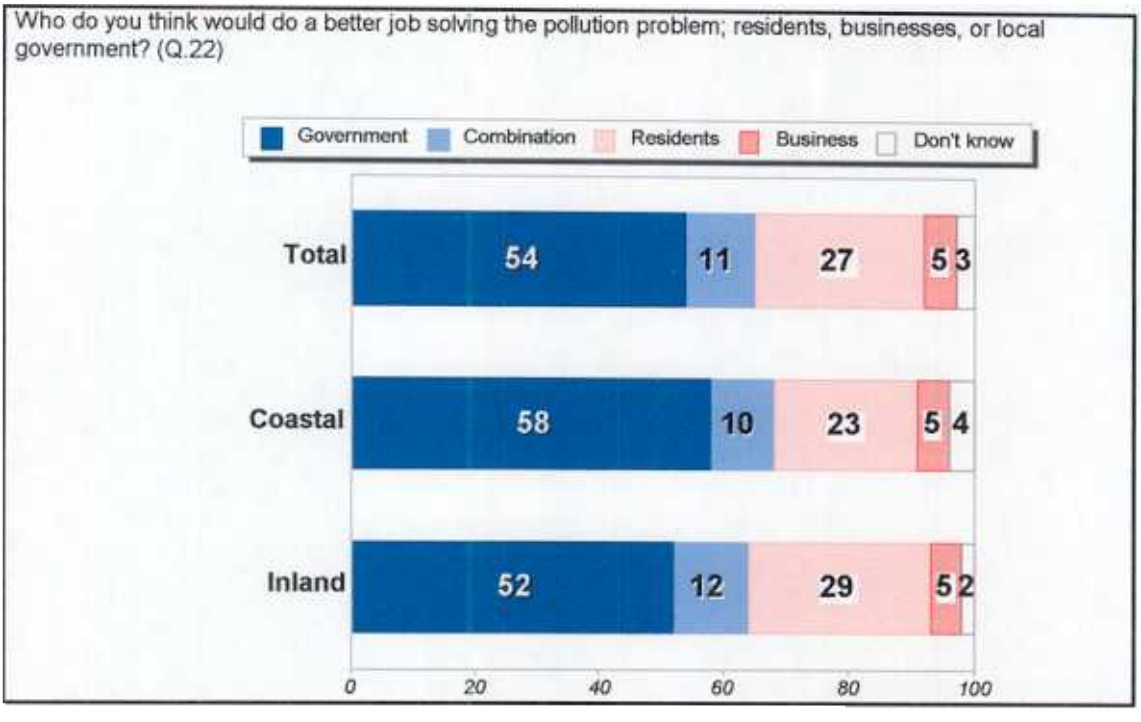
	Total		Coastal		Inland	
	First Mentions	*Total Mentions*	*First Mentions*	*Total Mentions*	*First Mentions*	*Total Mentions*
Litter dropped by people	24	34	24	31	23	36
Factories	22	35	18	32	25	37
Homeowners who use pesticides and lawn chemicals	12	25	14	28	11	23
Improperly maintained cars that leak	7	18	9	19	6	17
Agriculture	7	13	8	14	7	12
Shopping center parking lots	5	10	5	11	5	10
Fast food businesses	4	8	4	8	4	9
Pet waste	2	7	3	9	1	5
Don't know	17	17	15	15	18	18

A substantial majority of the respondents believed that government should be "primarily responsible" for solving the pollution problem. About the same number believed that government would "do a better job" of solving the problem compared with residents or businesses (see Figure 8).

Figure 8

Government Role and Effectiveness in Pollution Control

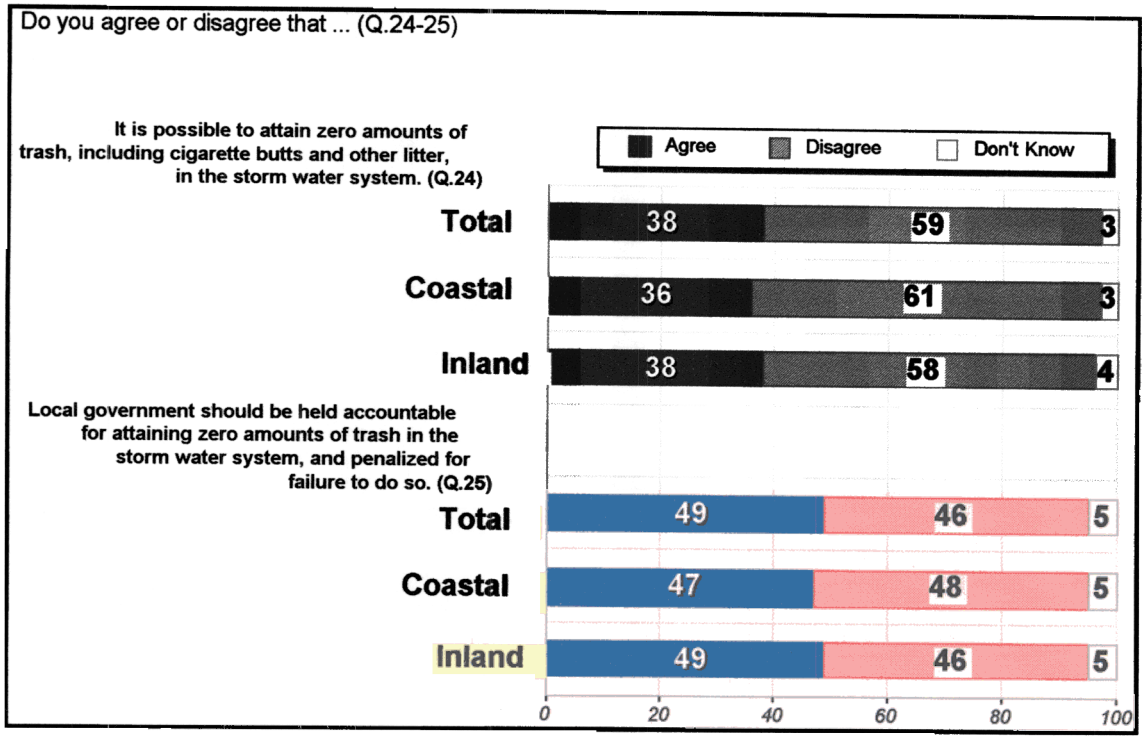




With respect to particular TMDL strategies, two-thirds (63% coastal, 68% inland) of the survey respondents stated that they would favor a law similar to the Los Angeles watershed trash TMDL and require cities to be responsible for ensuring zero amounts of trash in the storm water system. However, a substantial majority (61% coastal, 58% inland) did not believe that it is possible to attain zero amounts of trash in the storm water system. Given such perceptions, respondents were split on whether local government should be held accountable for a zero trash discharge standard (see Figure 9).

Figure 9

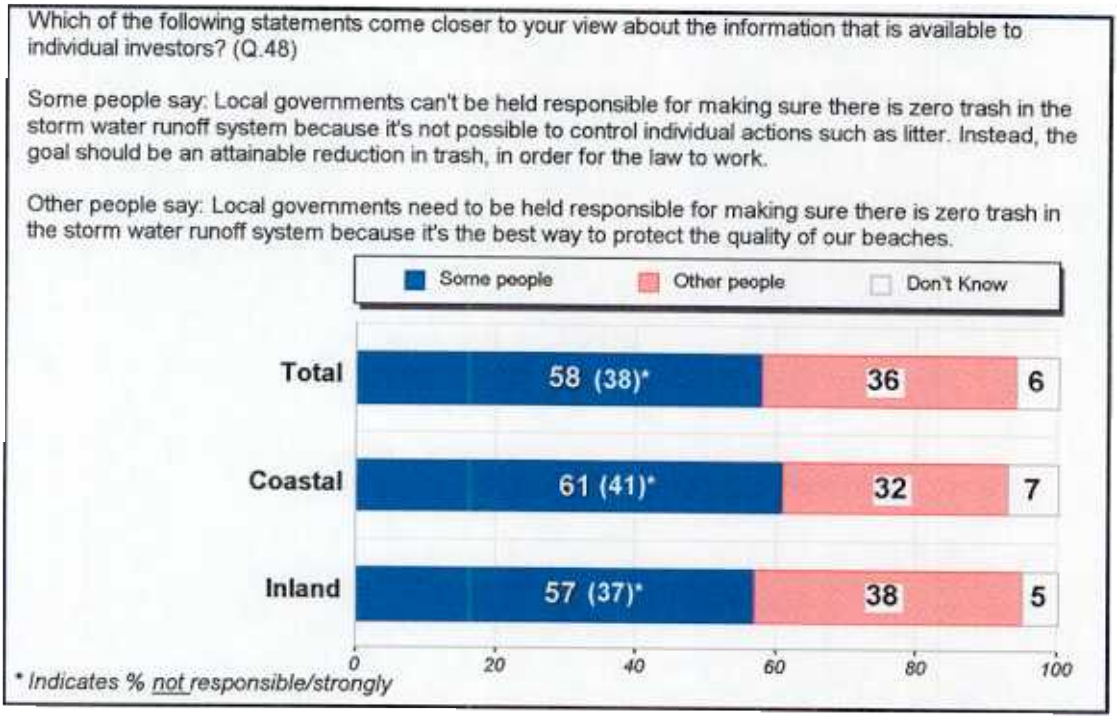
Attitudes Toward a Zero-Discharge Trash TMDL Law



When asked more particularly about the attainability of zero trash discharges, survey respondents significantly preferred (61% coastal, 57% inland) a law that would mandate "attainable reductions" and which would not hold local governments responsible for a zero discharge standard. About one-third of the respondents (32% coastal, 38% inland) favor a law that imposes and enforces a zero-discharge standard on local governments (see Figure 10).

Figure 10

Attainable and Zero-Discharge TMDL Enforcement Approaches



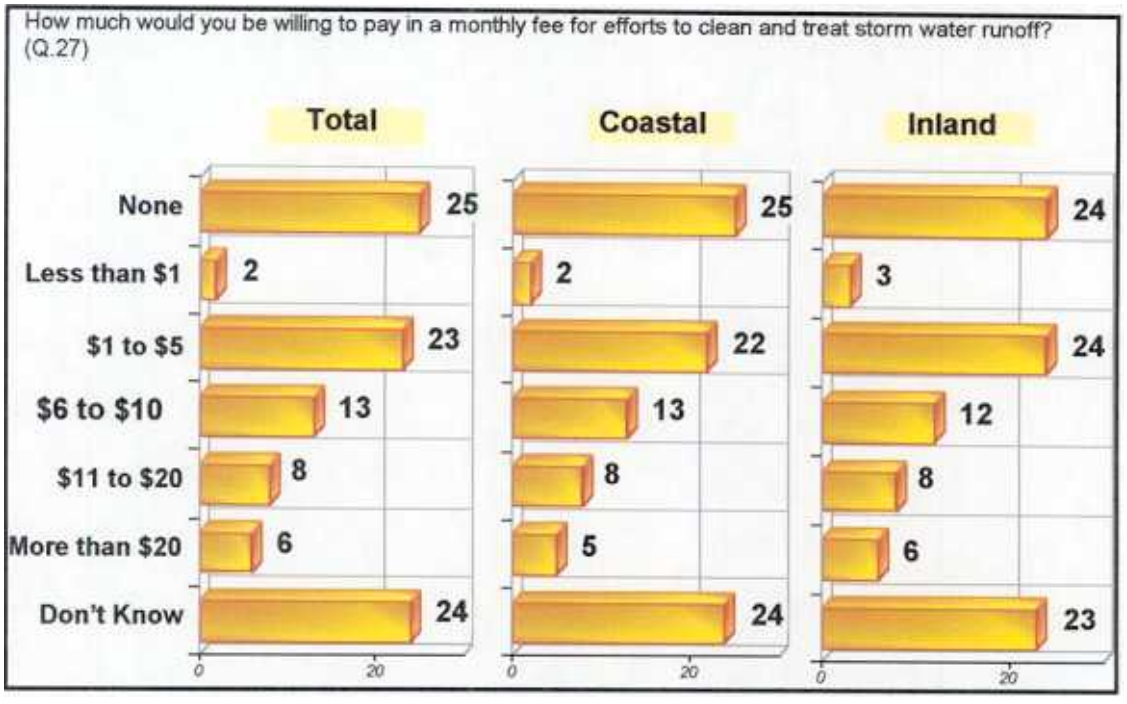
Both inland and coastal Los Angeles area voters strongly believe that local government should be responsible for water quality and stormwater runoff control programs. Most believe that government would most effectively achieve such controls. Area residents are willing to set zero-discharge trash goals, but would significantly temper enforcement to reflect "attainable" levels of trash reduction. Litter, business and residences are thought to most significantly contribute to run-off water quality problems.

3. Funding Preferences

About 25% of the survey respondents (25% coastal, 24% inland) stated that they would not be willing to pay anything for stormwater-related water quality programs. Another 25% (24% coastal, 27% inland) would be willing to pay less than one dollar to five dollars per month, and 27% would pay from $6-$20 per month (see Figure 11). Assuming that each of Los Angeles County's approximately 3 million households are willing to pay $5 per month for TMDLs, the total potential annual program revenue would be approximately $180 million.[26]

Figure 11

Monthly Payment Preference Ranges

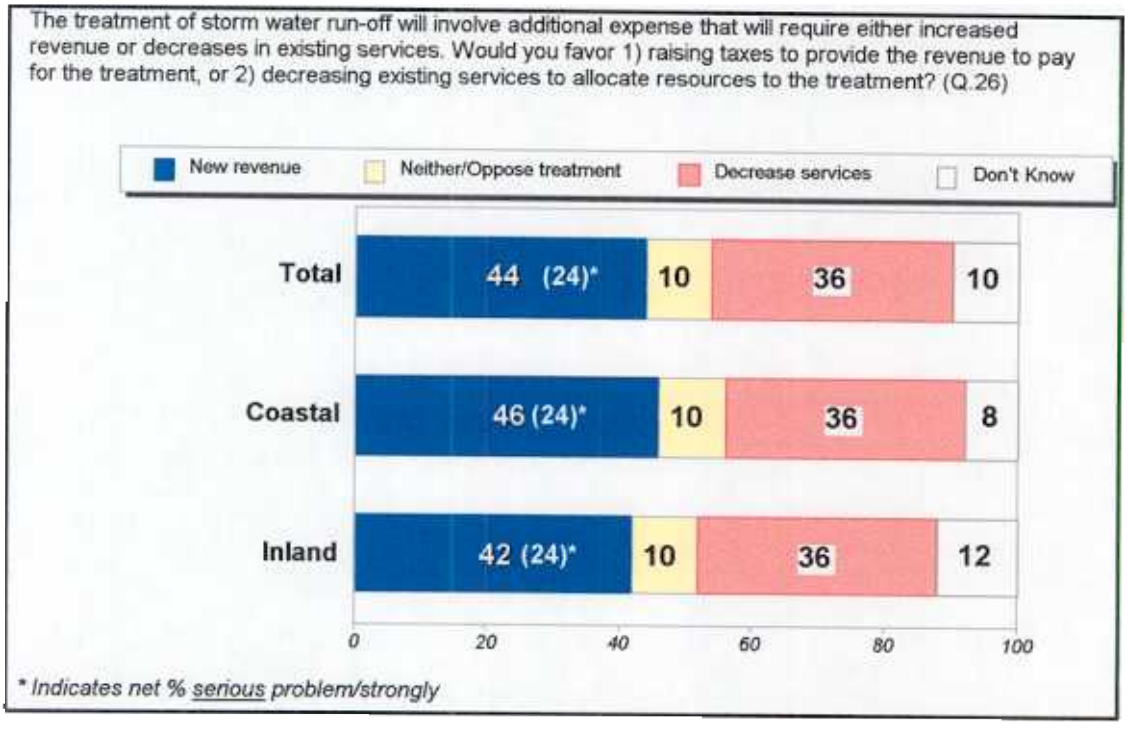


[26] The total households estimated for Los Angeles County in the 2001 supplemental survey profile was 3.129 million. See, e.g., http://www.census.gov/acs/www/Products/Profiles/Single/2001/SS01/Tabular/050/05000US060371.htm.

Los Angeles area residents are opposed to diverting funds that pay for existing government services to TMDL and stormwater cleanup programs. About 44% (46% coastal, 42% inland) believe that stormwater treatment program funding should be derived from "new revenue." Only 36% would be willing to "decrease existing services" to fund run-off controls (see Figure 12).

Figure 12

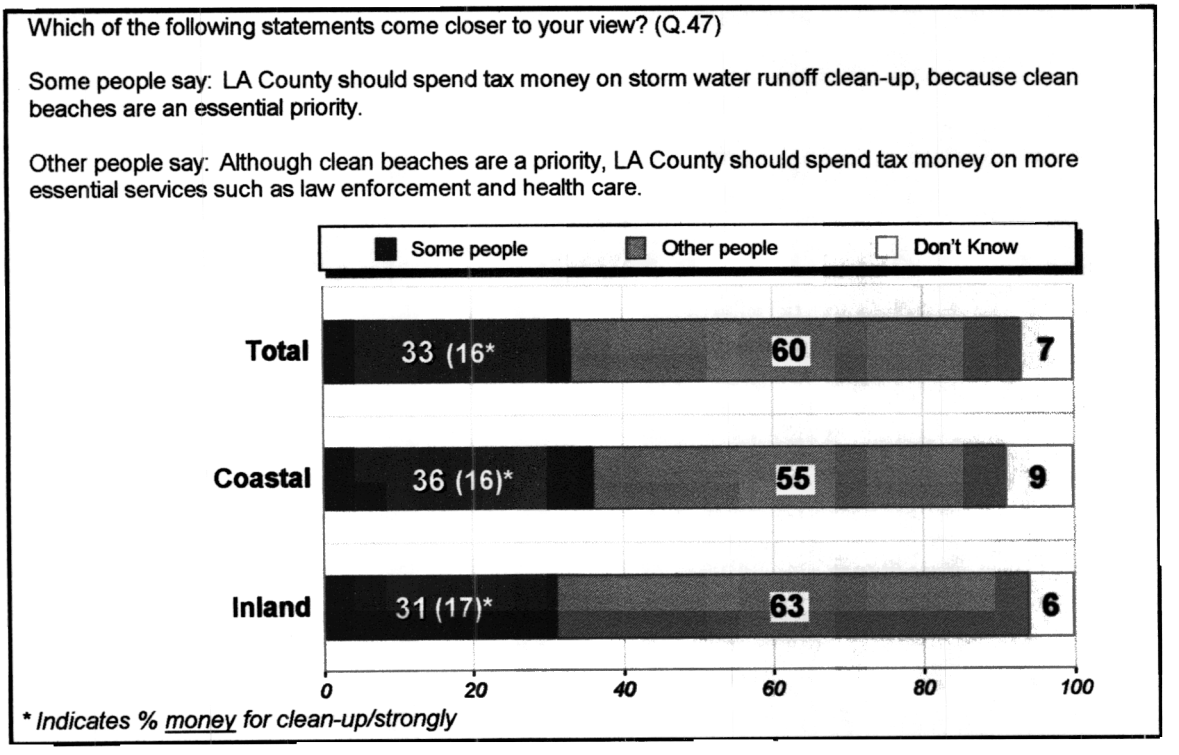
New Revenue or Funding From Existing Services



The survey respondents were particularly opposed to funding TMDLs and water quality programs at the expense of "essential services" like law enforcement and health care. About 60% (55% coastal, 63% inland) believed that any public revenue should be directed to essential services in lieu of run-off controls (see Figure 13).

Figure 13

Essential Services and Stormwater Cleanup Priorities

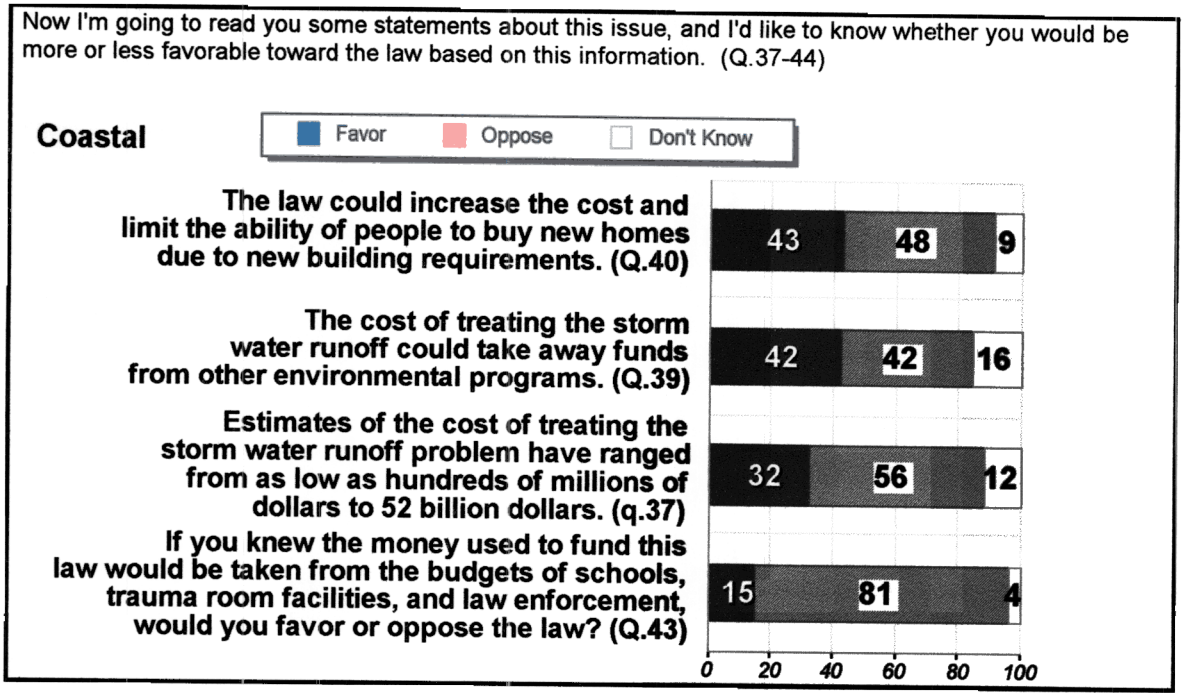


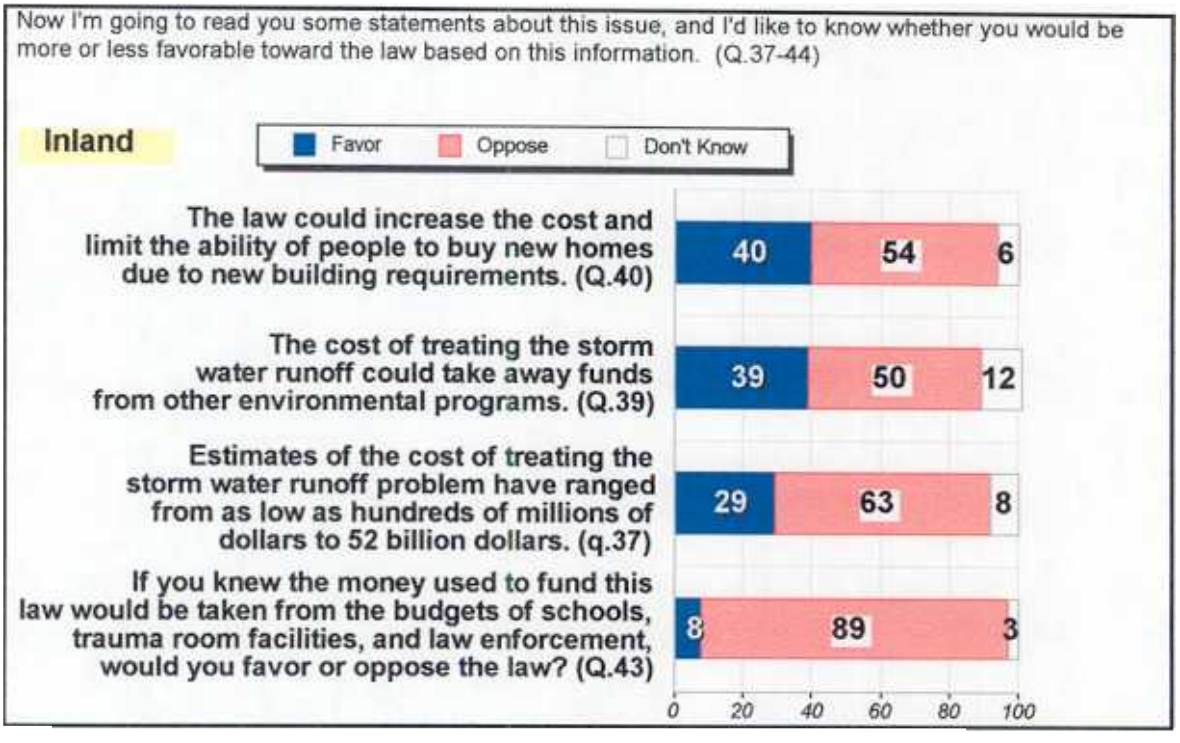
Substantial majorities of respondents opposed funding TMDL and stormwater cleanup programs at the expense of any specific existing public program examined in the survey. About 86% (81% coastal, 89% inland) oppose diverting funds from schools, medical facilities or law enforcement. About 61% (56% coastal, 63% inland) would oppose program funding if the costs approached the levels identified in recent stormwater advanced treatment facility expense estimates (see Figure 14).[27] Survey respondents were less opposed to funding strategies that might increase the cost of groceries, fast food, and housing, or which reallocated funds from other environmental programs.

[27] See, e.g., Gordon, et, al, "An Economic Impact Evaluation Of Proposed Storm Water Treatment For Los Angeles County" USC School of Public Policy, 2002; County Sanitation Districts of Los Angeles County "Review of the Report 'Caltrans Cost of Storm Water Treatment for the Los Angeles County NPDES Permit Area'" (2002); Brown and Caldwell, "Costs of Storm Water Treatment for Los Angeles NPDES Permit Area" Prepared for the California Department of Transportation (1998).

Figure 14

Desirability of Funding from Existing Programs

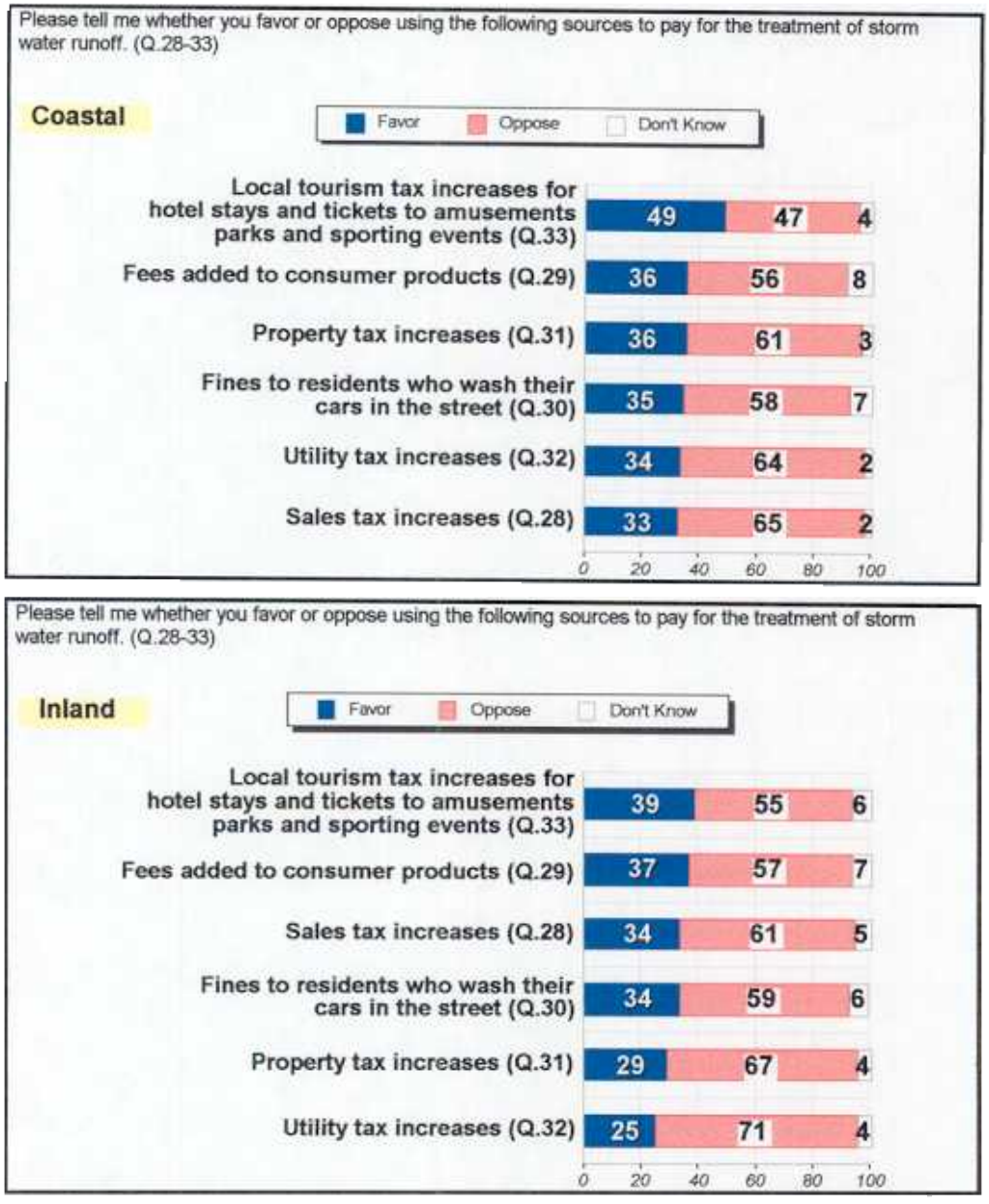




Los Angeles residents oppose all new, general taxes that might be levied to fund stormwater programs, including utility tax increases (64% coastal, 71% inland), property tax increases (61% coastal, 67% inland), sales tax increases (65% coastal, 61% inland), fines for washing cars in streets (58% coastal, 59% inland), and fees added to the cost of consumer goods (57% coastal, 56% inland). Local tourism tax increases on hotels and tickets to amusement parks or sporting events met with the least opposition (see Figure 15).

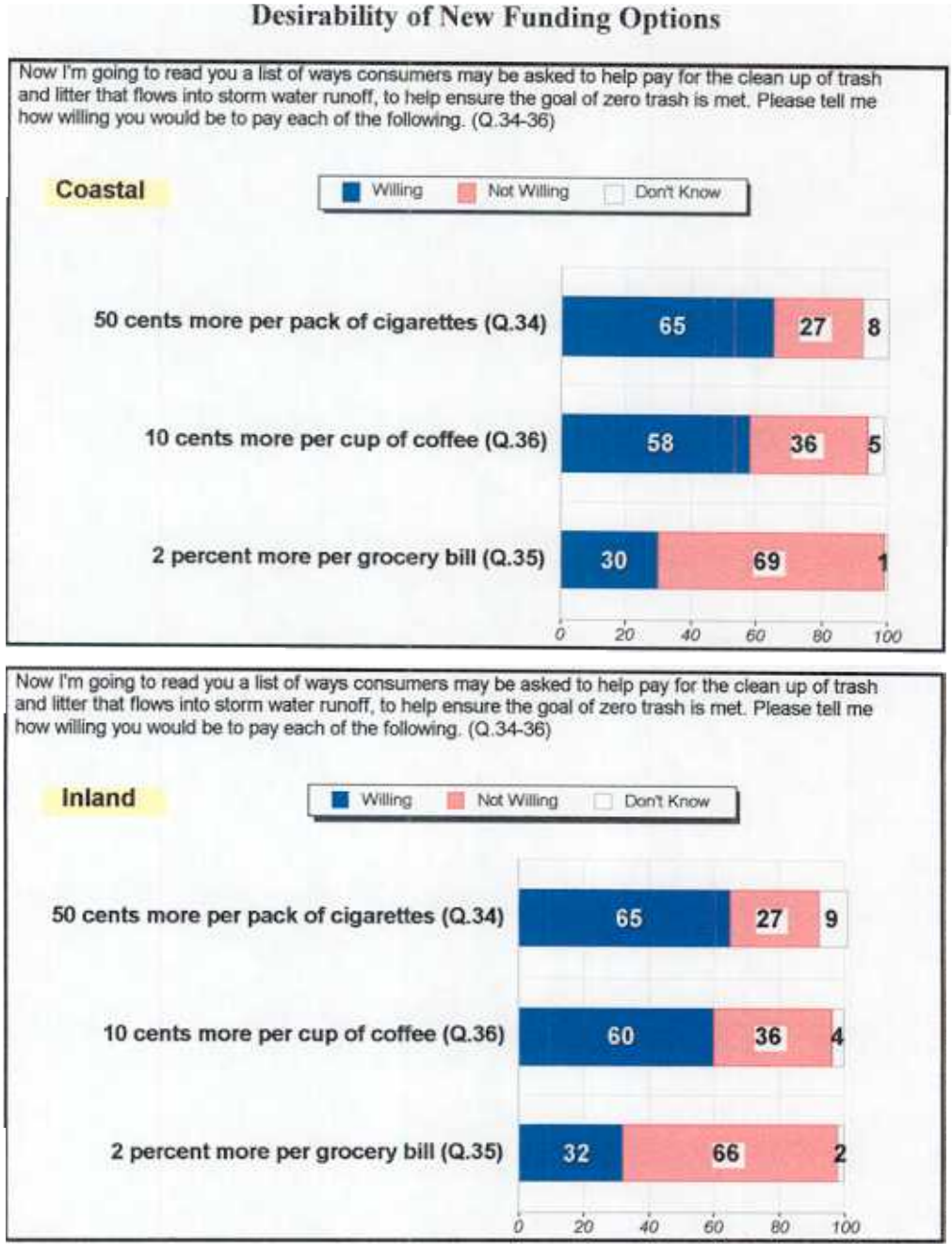
Figure 15

Desirability of New Funding Options



When cast as pollution-generation fees, however, survey respondents favored certain options. About 65% were willing to tax cigarettes by 50 cents per pack and 60% (58% coastal, 60% inland) would pay a 10 cent per cup fee for coffee (see Figure 16).

Figure 16



In general, the public appears willing to fund TMDL and stormwater related programs primarily by means of new, generation-specific fees that do not adversely affect existing services. These fees could produce significant revenue. According to the state Legislative Analyst Office, for example, in 1999-2000 California raised $1.3 billion from an 87 cent per pack tax, indicating total consumption of about 1.45 billion packs per year.[28] Assuming about 30% of that total was consumed in Los Angeles, and that consumption did not decrease due to additional taxes, a 50 cents per pack local tax would generate about $210 million in annual revenues for local TMDL and other water quality programs. A statewide 50 cent per pack tax would generate approximately $700 million per year assuming current consumption levels are maintained. Most voters do not, however, want to divert resources from essential services or even less significant existing programs.

[28] See, http://www.lao.ca.gov/2001/tax_primer/0101_taxprimer_chapter5.html.

IV. Implications for TMDL Funding

The survey results show that both inland and coastal Los Angeles County area likely voters have clear perspectives about how to allocate public resources. They strongly prefer to fund essential services and to fund additional programs, like environmental and water quality concerns, only as new revenue may be available. Among various options, fees that are demonstrably linked with adverse water quality, such as those related to coffee cups or cigarettes, are viewed as the most desirable funding approach.

Respondents also indicate that while they understand and approve of "bright-line" regulatory standards such as zero-discharge trash limits, they do not feel it is appropriate to hold government entities responsible for unattainable outcomes. Instead, as illustrated by the trash TMDL, most desire that government be held accountable for "attainable reductions" of adverse water discharges. Approaches that involve very significant or disproportionate expense are also strongly disfavored.

These results indicate that area residents are very concerned that the funds they spend on water quality will be used to achieve high priority, realistic objectives. Given this perspective, the survey suggests that there several significant issues must be addressed to assure that TMDL programs are funded with adequate resources:

> Expenditures should be demonstrably linked with attainable constituent reductions that generate identifiable, reasonable, and significant social and ecological benefits.
>
> Funding should be tailored to the extent possible by means of generator-specific fees that defray the costs of protecting water quality specifically attributable to the constituents of concern.
>
> To avoid reducing public support for TMDL and water quality programs, new regulations should be tailored as narrowly as possibly to reduce costs and limit funding conflicts with other social and economic priorities. In particular, TMDL and water quality funding should not come at the expense of social priorities that are more highly valued by the public, including education, health and law enforcement.